EXAMINATION EVALUATION SYSTEM

USER'S GUIDE

TABLE OF CONTENTS

Introduction 1

System Features 2

Information Requirements for Submission 3

Standard Answer Sheet 4

Options 5

Description of System Output 8

Appendix

Sample Submission Form	Appendix	A
Sample Standard Answer Sheet	Appendix	B
Sample System Output	Appendix	C

INTRODUCTION

This document serves as a guide for the use of the Examination Evaluation System.
The teaching staff is invited to take full advantage of this system.
The Examination Evaluation System was developed to provide the information requirements that would satisfy the maximum number of teachers. In addition to providing student scores, the system produces statistical information which may be used to further evaluate student and exam performance. Some teachers, especially those that are not statistically inclined, may not need to use all of the information presented.
All statistics presented are compatible with the text: Statistical Analysis in Psychology and Education (Third Edition) written by George A. Ferguson and published by McGraw-Hill.

Exam submissions should be submitted to the attention of Paul Price, Information Technology Services Department, Administration Building, (H-Building), Room H-213.
Generally the results will be available forty-eight hours after the test submission. In some cases, when the demand is at its peak, or when equipment problems occur, the delay may be longer.

Any questions concerning the use of the system may be directed to Information Technology Services at local 7158.

SYSTEM FEATURES

The Examination Evaluation System provides the following features:

a.) Processes examinations that consist of up to 150 multiple choice questions.

b.) Each question may have a maximum of five choices.

c.) Produces exam statistics such as mean, standard deviation, and frequency distribution.

d.) Produces a detailed report consisting of student name, student number, various raw scores and percentage scores, test value score and additional statistics.

e.) Produces an item analysis for each question in the examination.

f.) Produces a distractor effectiveness analysis for each question in the examination.

g.) Allows more than one correct response for a question (alternate answers option).

h.) Allows more emphasis to be placed on certain questions or for a question to be eliminated (question weighting option).

i.) Allows a student to be penalized for wrong answers (penalty for guessing option).

INFORMATION REQUIREMENTS FOR SUBMISSION

The following must be provided for each set of examinations to be processed.

i. A completed Exam Submission Form (refer to Appendix A)

ii. A master answer sheet identifying the correct answer to each question. The master answer sheet is identified by entering a value of "0000001" for the student number and by entering the teacher's name in the name area of the answer sheet. The corresponding boxes under these two areas must also be clearly marked.

iii. The student answer sheets all of which are facing the same direction.

If Question Weighting option is indicated, please provide a list of the question numbers whose weight is other than one. Be sure to provide the desired question weight.

If the Alternate Answer option is indicated, please provide a list of the question numbers along with the alternate answers that were not indicated on the master answer sheet. (Be sure to mark only one correct answer per question on the master answer sheet).

Failure to provide the above requirements may lead to rejection of the submission.

STANDARD ANSWER SHEET

One type of answer sheet is available. Standard Answer Sheet identifies question choices by the designation of A, B, C, D and E as well as question choices by the designation of 1, 2, 3, 4 and 5. A sample of this type of answer sheet can be found in Appendix B.

Because the answer sheets are optionally scanned, care must be taken to ensure that they are properly marked. Students should be informed of the following rules prior to their entering any marks on the forms:

i. Use a reasonably sharp HB (or harder) lead pencil.

ii. Do not enter any marks except in the designated areas.

iii. Do not write any notes on the form or cross out any area of the form.

iv. Print name and blacken corresponding boxes in the student name area.

v. Print student number and blacken corresponding boxes in the student number area.

vi. Never make a mark that cannot be erased.

vii. Always erase mistakes completely.

viii. Use a medium amount of pressure when entering a mark. The mark should fill but not exceed the pre-printed boundaries.

OPTIONS

This section refers to the three options that are available in the Examination Evaluation System.

I - QUESTION WEIGHTING OPTION

The question weighting option allows selected questions to either be eliminated from an exam by assigning a weight of zero, or to be given greater emphasis in the exam by assigning a weight from two to five.

The question weighting option does not affect any of the raw scores (i.e. number of correct answers, number of incorrect answers and number of blank responses). It will affect the percentage scores, the test value score and any associated statistics such as Z-score, etc.

To invoke, this option, indicate on the Exam Submission Form that question weighting is to be in effect. Then for all questions whose weight is other than one, list the question numbers and the desired weights.

One may verify the question weights in effect for a submission by looking at the Item Analysis Report or the Distractor Effectiveness Analysis Report.

Also the question weighting option will be indicated in the first report under the "Exam Option Chosen" title.

II - PENALTY FOR GUESSING OPTION

The penalty for guessing option penalizes a student for selecting a wrong response (blank answers are not included). Statistically, if a student attempts a random guess for a five multiple choice question, he has a one chance in five probability of guessing the correct response. Since the penalty for guessing option penalizes a student for wrong attempted responses, theoretically the student will only respond to questions he is reasonably certain of getting correct.

If this option is chosen, it must be announced to the class prior to the start of the examination.

The penalty factor per incorrect response depends on the number of choices each question has. If there are n choices per question the penalty is (1/n-1) per incorrect response. Thus for a 5 multiple choice question the penalty is 1/4 mark; for a 4 multiple choice question the penalty is 1/3 mark; for a 3 multiple choice question the penalty is 1/2 mark; and for a 2 multiple choice the penalty is 1 mark.

To invoke this option simply indicate on the Exam Submission form that it is to be in effect.

If this option is in effect during the exam processing, it will be indicated under the "Special Options Chosen" title of the first report.

One will also be able to see the effect of invoking the penalty for guessing option by comparing the percent after weighting score and the percent after weighting and guessing score.

III - ALTERNATE ANSWERS OPTIONS

The alternate answers option allows for selected questions to have more than one correct answer.

This feature is useful in situations such as when an exam was reviewed with the class and it was revealed that a second answer as also technically correct.

To invoke this option simply indicate on the Exam Submission Form that alternate answers are to be used. Be sure to mark only one correct response on the master answer sheet. Provide a list of question numbers and the associated alternate answers.

A maximum of 4 alternate answers may be provided for any one question thus allowing a possibility of 5 correct answers. This option should be used if you want to credit all students with a correct response rather than eliminating the question by using the question weighting option.

The words "Alternate Answers" will appear under the "Special Options Chosen" title in the first report if this option is in effect.

Correct answers to questions may be verified by looking at the Distractor Effectiveness Analysis Report.

DESCRIPTION OF SYSTEM OUTPUT

Please refer to Appendix C for a sample output from the Examination Evaluation System.

This section explains the information presented in each report.

All reports will contain the following information in the top left hand corner for identification:

course number
section number — this information is taken from the Exam Submission form.

name — this is the name taken from the master answer sheet

I - REPORT I

A. Examination Descriptives

i. the "number of exams marked" field is useful for verifying that all exams submitted have been scored.

ii. the "number of exam questions" (including zero weight questions) will confirm the number of questions in the exam that have been scored.

iii. the "number of zero weight questions" identifies the number of questions that are to be eliminated.

iv. the "number of choices per question" is especially important when the penalty for guessing option is used.

v. the "requested test value" identifies a score that the exam is to be marked out of. This applies to the test value score on the Student Analysis Report. If no value was entered on the Exam Submission form, the default will be 25.

vi. the "mean of correct responses" refers to the average raw score for the class.

vii. the "mean of scores after weighting" refers to the average percentage score of the class after question weighting (if any) has been taken into account.

viii. the "mean of scores after weighting and guessing" refers to the average percentage score of the class after weighting (if any) and penalty for guessing (if any) has been taken into account.

ix. the "mean of test value scores" refers to the average test value score for the class.

x. the "median of weighting and guessing score" refers to the middle percentage score for the class after question weighting and penalty for guessing have been taken into account.

xi. the "standard deviation" refers to the variance of the percentage scores after weighting and guessing from the mean.

xii. the "text reliability" is a statistical quantity also known as the Kuder Richardson formula 21. Please refer to the text identified in the Introduction for further information.

xiii. the "standard error of measurement" is another statistical quantity that refers to test performance. Further discussion may be obtained from the text identified in the Introduction.

B. Exam Options Chosen

This section identifies each option that is in effect while processing the exam submission. If the specified options are in effect the following will be printed: "No special options chosen".

C. Frequency Distribution

This section identifies the number of students who are in each identified percentage score interval.

II - STUDENT ANALYSIS

This report is printed in the following three sequences:

- score sequence
- name sequence
- student number sequence

The following information is presented for each student:

i.	Student name	as marked on the answer sheet.
ii.	Student I.D.	as marked on the answer sheet.
iii.	# correct	refers to the number of questions answered correctly.
iv.	# wrong	refers to the number of questions answered incorrectly.
v.	Blank	refers to the number of questions that were not attempted
vi.	Percent after Weighting	refers to the percentage score (i.e. out of 100) that takes into account any question weighting.
vii.	Percent after Weighting and Guessing	refers to the percentage score after the question weighting and penalty for guessing options have been taken into account.
viii.	Test Value Score	refers to the score that is out of the requested test value. (If no test value was requested on the Exam Submission form, the default test value score is out of 25).

ix. Z-score — refers to the deviation of the students score from the mean (in standard deviation units).

x. Percentile — refers to the student relative standing compared to his exam group. For example, if a student's percentile is 60.00 it means that approximately 60 percent of the class obtained a lower mark than he did.

xi. Stanine Score — is another measure of a students standing within his exam group. The stanine scores range from 1 to 9. If the number of students taking an exam is too small, a warning message will be printed that the stanine score cannot be accurately interpreted. Please refer to Appendix C for further details.

III - ITEM ANALYSIS

The following information is presented for each exam question:

i. question number

ii. question weight

iii. # of correct responses — refers to the total number of students who answered this question correctly.

iv. index of difficulty — refers to a percentage which serves as an indicator on the relative ease or difficulty of an exam question. A high index value indicates that the question is easy. An index value of zero indicates that no one answered the question correctly.

v.	# of incorrect and blank responses	refers to the number of students who responded to this question incorrectly or who did not respond.
vi.	mean of correct	refers to the average percentage scores of the students who answered the question correctly.
vii.	mean of incorrect	refers to the average percentage score of students who answered this question incorrectly or who did not respond.
viii.	index of discrimination	also known as the point biserial index is an indicator which is used to determine if a question attracts the higher or lower achievers in the exam. The range of values if from -1.00 (meaning that the question is attracting only the poor achievers to answer correctly) to +1.00 which means that the question is attracting only the higher achievers to answer correctly. A value of zero indicates that the question does not discriminate against higher or lower achievers.
ix.	Z-score	refers to the deviation of the mean of correct from the class average (in standard deviation units). It also can be useful in verifying if a question discriminates against the higher or lower achievers.

IV - DISTRACTOR EFFECTIVENESS ANALYSIS

The following information is presented for each question in the exam by question choice:

i.	upper 25%	refers to the number of students in the top twenty five percent of the exam group who did not respond; who responded to choice A; choice B; choice C; choice D; and choice E.
ii.	lower 25%	refers to the number of students in the bottom twenty five percent of the exam group who did not respond; who responded to choice A; choice B; choice C; choice D; and choice E.
iii.	class	refers to the total number of students in the exam group who did not respond; who responded to choice A; choice B; choice C; choice D; and choice E.

Note that in the column indicated RIGHT the number indicated in this column refers to the correct answer.

APPENDIX A
SAMPLE SUBMISSION FORM

	Mail
	Pickup

Vanier College
EXAMINATION EVALUATION SYSTEM
***EXAM** INFORMATION*

Please provide the following information:

Teacher Name _____

Course Number _____

Section Number _____

Number of Exam Questions _____

Value of Exam _____

Question Weighting
☐ *No*
☐ *Yes (if yes, provide **weights of questions**)*

Penalty for Guessing
☐ *No*
☐ *Yes*

Alternate Answers
☐ *No*
☐ *Yes (if yes, provide **alternate answers**)*

Number of Choices per Question _____

Number of Exams Submitted _____

NOTE:
i) Please fill in teacher name and blacken the corresponding letters in the Name area of the Master Answer Sheet

*ii) The Master Answer Sheet must have **0000001** filled in under the Student Number area*

APPENDIX B
SAMPLE STANDARD ANSWER SHEET

Vanier College

MARKING INSTRUCTIONS

- Use HB pencil only.
- Do not use ink, ballpoint, or felt tip pens.
- Make no stray marks on this form.

CORRECT MARK

INCORRECT MARKS

YOUR LAST NAME

YOUR FIRST NAME

TEST I.D.

SECTION

STUDENT I.D. #

SCAN-TECH H10-896

	A	B	C	D	E
1	1	2	3	4	5
2	1	2	3	4	5
3	1	2	3	4	5
4	1	2	3	4	5
5	1	2	3	4	5
6	1	2	3	4	5
7	1	2	3	4	5
8	1	2	3	4	5
9	1	2	3	4	5
10	1	2	3	4	5
11	1	2	3	4	5
12	1	2	3	4	5
13	1	2	3	4	5
14	1	2	3	4	5
15	1	2	3	4	5
16	1	2	3	4	5
17	1	2	3	4	5
18	1	2	3	4	5
19	1	2	3	4	5
20	1	2	3	4	5
21	1	2	3	4	5
22	1	2	3	4	5
23	1	2	3	4	5
24	1	2	3	4	5
25	1	2	3	4	5
26	1	2	3	4	5
27	1	2	3	4	5
28	1	2	3	4	5
29	1	2	3	4	5
30	1	2	3	4	5

	A	B	C	D	E
31	1	2	3	4	5
32	1	2	3	4	5
33	1	2	3	4	5
34	1	2	3	4	5
35	1	2	3	4	5
36	1	2	3	4	5
37	1	2	3	4	5
38	1	2	3	4	5
39	1	2	3	4	5
40	1	2	3	4	5
41	1	2	3	4	5
42	1	2	3	4	5
43	1	2	3	4	5
44	1	2	3	4	5
45	1	2	3	4	5
46	1	2	3	4	5
47	1	2	3	4	5
48	1	2	3	4	5
49	1	2	3	4	5
50	1	2	3	4	5
51	1	2	3	4	5
52	1	2	3	4	5
53	1	2	3	4	5
54	1	2	3	4	5
55	1	2	3	4	5
56	1	2	3	4	5
57	1	2	3	4	5
58	1	2	3	4	5
59	1	2	3	4	5
60	1	2	3	4	5

	A	B	C	D	E
61	1	2	3	4	5
62	1	2	3	4	5
63	1	2	3	4	5
64	1	2	3	4	5
65	1	2	3	4	5
66	1	2	3	4	5
67	1	2	3	4	5
68	1	2	3	4	5
69	1	2	3	4	5
70	1	2	3	4	5
71	1	2	3	4	5
72	1	2	3	4	5
73	1	2	3	4	5
74	1	2	3	4	5
75	1	2	3	4	5
76	1	2	3	4	5
77	1	2	3	4	5
78	1	2	3	4	5
79	1	2	3	4	5
80	1	2	3	4	5
81	1	2	3	4	5
82	1	2	3	4	5
83	1	2	3	4	5
84	1	2	3	4	5
85	1	2	3	4	5
86	1	2	3	4	5
87	1	2	3	4	5
88	1	2	3	4	5
89	1	2	3	4	5
90	1	2	3	4	5

	A	B	C	D	E
91	1	2	3	4	5
92	1	2	3	4	5
93	1	2	3	4	5
94	1	2	3	4	5
95	1	2	3	4	5
96	1	2	3	4	5
97	1	2	3	4	5
98	1	2	3	4	5
99	1	2	3	4	5
100	1	2	3	4	5
101	1	2	3	4	5
102	1	2	3	4	5
103	1	2	3	4	5
104	1	2	3	4	5
105	1	2	3	4	5
106	1	2	3	4	5
107	1	2	3	4	5
108	1	2	3	4	5
109	1	2	3	4	5
110	1	2	3	4	5
111	1	2	3	4	5
112	1	2	3	4	5
113	1	2	3	4	5
114	1	2	3	4	5
115	1	2	3	4	5
116	1	2	3	4	5
117	1	2	3	4	5
118	1	2	3	4	5
119	1	2	3	4	5
120	1	2	3	4	5

	A	B	C	D	E
121	1	2	3	4	5
122	1	2	3	4	5
123	1	2	3	4	5
124	1	2	3	4	5
125	1	2	3	4	5
126	1	2	3	4	5
127	1	2	3	4	5
128	1	2	3	4	5
129	1	2	3	4	5
130	1	2	3	4	5
131	1	2	3	4	5
132	1	2	3	4	5
133	1	2	3	4	5
134	1	2	3	4	5
135	1	2	3	4	5
136	1	2	3	4	5
137	1	2	3	4	5
138	1	2	3	4	5
139	1	2	3	4	5
140	1	2	3	4	5
141	1	2	3	4	5
142	1	2	3	4	5
143	1	2	3	4	5
144	1	2	3	4	5
145	1	2	3	4	5
146	1	2	3	4	5
147	1	2	3	4	5
148	1	2	3	4	5
149	1	2	3	4	5
150	1	2	3	4	5

SAMPLE

APPENDIX C
SAMPLE SYSTEM OUTPUT

SAMPLE

VANIER COLLEGE COMPUTER CENTRE
EXAMINATION EVALUATION SYSTEM

LOG NO.: 307
DATE: 95/11/02
COURSE: 180-401
SECTION: test
CYNTHIA

EXAMINATION DESCRIPTIVES
==========

NUMBER OF EXAMS MARKED:	15
NUMBER OF EXAM QUESTIONS:	25
QUESTION WEIGHTING = 0 MARK:	0
QUESTION WEIGHTING = 1 MARK:	25
QUESTION WEIGHTING = 2 MARKS:	0
QUESTION WEIGHTING = 3 MARKS:	0
QUESTION WEIGHTING = 4 MARKS:	0
QUESTION WEIGHTING = 5 MARKS:	0
NUMBER OF CHOICES PER QUESTION:	5
REQUESTED TEST VALUE:	15
MEAN OF CORRECT RESPONSES:	21.20
MEAN OF SCORES AFTER WEIGHTING:	84.80
AFTER WEIGHTING AND GUESSING:	84.80
MEAN OF TEST VALUE SCORES:	12.72
MEDIAN OF WEIGHTING & GUESSING SCORE:	92.00
STANDARD DEVIATION:	18.79

EXAM OPTIONS CHOSEN
==========

ALTERNATE ANSWERS	n
QUESTION WEIGHTING	n
PENALTY FOR GUESSING	n

VANIER COLLEGE COMPUTER CENTRE
EXAMINATION EVALUATION SYSTEM

LOG NO.: 307
DATE: 95/11/02
COURSE: 180-401
SECTION: test
CYNTHIA

FREQUENCY DISTRIBUTION
==========

	00	0
1 -	10	0
11 -	20	0
21 -	30	0
31 -	40	0
41 -	50	2
51 -	60	1
61 -	70	0
71 -	80	1
81 -	90	3
91 -	100	8

VANIER COLLEGE COMPUTER CENTRE
EXAMINATION EVALUATION SYSTEM

STUDENT ANALYSIS
==========

LOG NO.: 307
DATE: 95/11/02
COURSE: 180-401 SECTION: test
CYNTHIA

* SCORE SEQUENCE *

N A M E		STUDENT I.D.	# CORRECT	# WRONG	BLANK	** PERCENT WEIGHTING	AFTER ** WEIGHTING & GUESSING	TEST VALUE SCORE	Z-SCORE	PERCENTILE
DE LUCA	P	8877654	12	13	0	48.00	48.00	7.20	-1.96	6.67
GERE	RICHARD	9988999	12	13	0	48.00	48.00	7.20	-1.96	6.67
KAY	MARY	7877777	14	11	0	56.00	56.00	8.40	-1.53	16.67
WONG	KEN	6543210	20	5	0	80.00	80.00	12.00	-0.26	23.33
THERIAULT	S	4777654	21	2	2	84.00	84.00	12.60	-0.04	30.00
BOLTON	MICHAEL	0	22	3	0	88.00	88.00	13.20	0.17	40.00
TAYLOR	LIZ	1111111	22	3	0	88.00	88.00	13.20	0.17	40.00
CARON	PIERRE	2121212	23	2	0	92.00	92.00	13.80	0.38	50.00
JONES	MARK	3434343	24	1	0	96.00	96.00	14.40	0.60	63.33
JANE	MARY	9599999	24	1	0	96.00	96.00	14.40	0.60	63.33
BROWN	BOB	7888888	24	1	0	96.00	96.00	14.40	0.60	63.33
REEVE	CHRIS	7711111	25	0	0	100.00	100.00	15.00	0.81	76.67
LEBLOND	DENIS	9222222	25	0	0	100.00	100.00	15.00	0.81	83.33
DONALD	DUCK	9000020	25	0	0	100.00	100.00	15.00	0.81	90.00
MICKEY	MOUSE	2233543	25	0	0	100.00	100.00	15.00	0.81	96.67

THE SAMPLE MEAN IS: 12.72/ 25 OR 50.88%

THE STANDARD DEVIATION IS: 18.79 OR 75.17%

VANIER COLLEGE COMPUTER CENTRE
EXAMINATION EVALUATION SYSTEM

STUDENT ANALYSIS
==========

LOG NO.: 307
DATE: 95/11/02
COURSE: 180-401 SECTION: test
CYNTHIA

* NAME SEQUENCE *

N A M E		STUDENT I.D.	# CORRECT	# WRONG	BLANK	** PERCENT WEIGHTING	AFTER ** WEIGHTING & GUESSING	TEST VALUE SCORE	Z-SCORE	PERCENTILE
BOLTON	MICHAEL	0	22	3	0	88.00	88.00	13.20	0.17	40.00
BROWN	BOB	7888888	24	1	0	96.00	96.00	14.40	0.60	63.33
CARON	PIERRE	2121212	23	2	0	92.00	92.00	13.80	0.38	50.00
DE LUCA	P	8877654	12	13	0	48.00	48.00	7.20	-1.96	6.67
DONALD	DUCK	9000020	25	0	0	100.00	100.00	15.00	0.81	90.00
GERE	RICHARD	9988999	12	13	0	48.00	48.00	7.20	-1.96	6.67
JANE	MARY	9599999	24	1	0	96.00	96.00	14.40	0.60	63.33
JONES	MARK	3434343	24	1	0	96.00	96.00	14.40	0.60	63.33
KAY	MARY	7877777	14	11	0	56.00	56.00	8.40	-1.53	16.67
LEBLOND	DENIS	9222222	25	0	0	100.00	100.00	15.00	0.81	83.33
MICKEY	MOUSE	2233543	25	0	0	100.00	100.00	15.00	0.81	96.67
REEVE	CHRIS	7711111	25	0	0	100.00	100.00	15.00	0.81	76.67
TAYLOR	LIZ	1111111	22	3	0	88.00	88.00	13.20	0.17	40.00
THERIAULT	S	4777654	21	2	2	84.00	84.00	12.60	-0.04	30.00
WONG	KEN	6543210	20	5	0	80.00	80.00	12.00	-0.26	23.33

THE SAMPLE MEAN IS: 12.72/ 25 OR 50.88%

THE STANDARD DEVIATION IS: 18.79 OR 75.17%

VANIER COLLEGE COMPUTER CENTRE
EXAMINATION EVALUATION SYSTEM

STUDENT ANALYSIS
==========

LOG NO.: 307
DATE: 95/11/02
COURSE: 180-401 SECTION: test
CYNTHIA

* ID. SEQUENCE *

N A M E		STUDENT I.D.	# CORRECT	# WRONG	BLANK	** PERCENT WEIGHTING	AFTER ** WEIGHTING & GUESSING	TEST VALUE SCORE	Z-SCORE	PERCENTILE
BOLTON	MICHAEL	0	22	3	0	88.00	88.00	13.20	0.17	40.00
TAYLOR	LIZ	1111111	22	3	0	88.00	88.00	13.20	0.17	40.00
CARON	PIERRE	2121212	23	2	0	92.00	92.00	13.80	0.38	50.00
MICKEY	MOUSE	2233543	25	0	0	100.00	100.00	15.00	0.81	96.67
JONES	MARK	3434343	24	1	0	96.00	96.00	14.40	0.60	63.33
THERIAULT	S	4777654	21	2	2	84.00	84.00	12.60	-0.04	30.00
WONG	KEN	6543210	20	5	0	80.00	80.00	12.00	-0.26	23.33
REEVE	CHRIS	7711111	25	0	0	100.00	100.00	15.00	0.81	76.67
KAY	MARY	7877777	14	11	0	56.00	56.00	8.40	-1.53	16.67
BROWN	BOB	7888888	24	1	0	96.00	96.00	14.40	0.60	63.33
DE LUCA	P	8877654	12	13	0	48.00	48.00	7.20	-1.96	6.67
DONALD	DUCK	9000020	25	0	0	100.00	100.00	15.00	0.81	90.00
LEBLOND	DENIS	9222222	25	0	0	100.00	100.00	15.00	0.81	83.33
JANE	MARY	9599999	24	1	0	96.00	96.00	14.40	0.60	63.33
GERE	RICHARD	9988999	12	13	0	48.00	48.00	7.20	-1.96	6.67

THE SAMPLE MEAN IS: 12.72/ 25 OR 50.88%

THE STANDARD DEVIATION IS: 18.79 OR 75.17%

VANIER COLLEGE COMPUTER CENTRE
EXAMINATION EVALUATION SYSTEM

I T E M A N A L Y S I S

LOG NO.: 307
DATE: 95/11/02
COURSE: 180-401 SECTION: test
CYNTHIA

QUESTION NUMBER	QUESTION WEIGHT	# CORRECT RESPONSES	INDEX OF DIFFICULTY	# INCORRECT AND BLANK RESPONSES	MEAN OF CORRECT	MEAN OF WRONG/BLANK	INDEX OF DISCRIMINATION	Z-SCORE
1	1	10	66.67	5	94.40	65.60	0.53	0.51
2	1	10	66.67	5	94.40	65.60	0.53	0.51
3	1	15	100.00	0	84.80	0.00	0.00	0.00
4	1	11	73.33	4	94.55	58.00	0.53	0.52
5	1	10	66.67	5	94.40	65.60	0.53	0.51
6	1	12	80.00	3	93.33	50.67	0.40	0.45
7	1	12	80.00	3	93.33	50.67	0.40	0.45
8	1	15	100.00	0	84.80	0.00	0.00	0.00
9	1	12	80.00	3	93.33	50.67	0.40	0.45
10	1	12	80.00	3	93.33	50.67	0.40	0.45
11	1	12	80.00	3	90.67	61.33	0.27	0.31
12	1	11	73.33	4	91.27	67.00	0.27	0.34
13	1	12	80.00	3	93.33	50.67	0.40	0.45
14	1	11	73.33	4	91.27	67.00	0.27	0.34
15	1	13	86.67	2	90.46	48.00	0.27	0.30
16	1	13	86.67	2	84.31	88.00	0.00	-0.03
17	1	14	93.33	1	86.86	56.00	0.13	0.11
18	1	15	100.00	0	84.80	0.00	0.00	0.00
19	1	15	100.00	0	84.80	0.00	0.00	0.00
20	1	14	93.33	1	84.29	92.00	0.00	-0.03
21	1	15	100.00	0	84.80	0.00	0.00	0.00
22	1	13	86.67	2	86.46	74.00	0.13	0.09
23	1	14	93.33	1	84.57	88.00	0.00	-0.01
24	1	13	86.67	2	85.23	82.00	0.13	0.02
25	1	14	93.33	1	84.86	84.00	0.00	0.00

VANIER COLLEGE COMPUTER CENTRE
EXAMINATION EVALUATION SYSTEM

LOG NO.: 307
DATE: 95/11/02
COURSE: 180-401
SECTION: test
CYNTHIA

DISTRACTOR EFFECTIVENESS ANALYSIS

	QUESTION #	BLANK	0 A	1 B	2 C	3 D	4 E	QUEST.WEIGHT	RIGHT	ANSWERS
UPPER 25%	1	0	4	0	0	0	0	1	0	
LOWER 25%		0	0	0	0	0	4			
CLASS		0	10	1	0	0	4			
UPPER 25%	2	0	0	4	0	0	0	1	1	
LOWER 25%		0	0	0	0	4	0			
CLASS		0	1	10	0	4	0			
UPPER 25%	3	0	0	0	4	0	0	1	2	
LOWER 25%		0	0	0	4	0	0			
CLASS		0	0	0	15	0	0			
UPPER 25%	4	0	0	0	0	4	0	1	3	
LOWER 25%		0	0	4	0	0	0			
CLASS		0	0	4	0	11	0			
UPPER 25%	5	0	0	0	0	0	4	1	4	
LOWER 25%		0	3	1	0	0	0			
CLASS		0	3	1	0	1	10			
UPPER 25%	6	0	0	0	0	0	4	1	4	
LOWER 25%		0	3	0	0	0	1			
CLASS		0	3	0	0	0	12			
UPPER 25%	7	0	0	0	0	4	0	1	3	
LOWER 25%		0	0	3	0	1	0			
CLASS		0	0	3	0	12	0			
UPPER 25%	8	0	0	0	4	0	0	1	2	
LOWER 25%		0	0	0	4	0	0			
CLASS		0	0	0	15	0	0			
UPPER 25%	9	0	0	4	0	0	0	1	1	
LOWER 25%		0	0	1	0	3	0			
CLASS		0	0	12	0	3	0			
UPPER 25%	10	0	4	0	0	0	0	1	0	
LOWER 25%		0	1	0	0	0	3			
CLASS		0	12	0	0	0	3			

VANIER COLLEGE COMPUTER CENTRE
EXAMINATION EVALUATION SYSTEM

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CYNTHIA

DISTRACTOR EFFECTIVENESS ANALYSIS
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	QUESTION #	BLANK	0 A	1 B	2 C	3 D	4 E	QUEST.WEIGHT	RIGHT	ANSWERS
UPPER 25%	11	0	0	0	4	0	0	1	2	
LOWER 25%		0	2	0	2	0	0			
CLASS		0	3	0	12	0	0			
UPPER 25%	12	0	0	0	4	0	0	1	2	
LOWER 25%		0	2	0	2	0	0			
CLASS		0	3	1	11	0	0			
UPPER 25%	13	0	4	0	0	0	0	1	0	
LOWER 25%		0	1	3	0	0	0			
CLASS		0	12	3	0	0	0			
UPPER 25%	14	0	0	0	0	4	0	1	3	
LOWER 25%		0	1	1	0	2	0			
CLASS		0	1	1	2	11	0			
UPPER 25%	15	0	0	0	0	4	0	1	3	
LOWER 25%		0	0	2	0	2	0			
CLASS		0	0	2	0	13	0			
UPPER 25%	16	0	4	0	0	0	0	1	0	
LOWER 25%		0	4	0	0	0	0			
CLASS		0	13	2	0	0	0			
UPPER 25%	17	0	4	0	0	0	0	1	0	
LOWER 25%		0	3	1	0	0	0			
CLASS		0	14	1	0	0	0			
UPPER 25%	18	0	0	4	0	0	0	1	1	
LOWER 25%		0	0	4	0	0	0			
CLASS		0	0	15	0	0	0			
UPPER 25%	19	0	0	4	0	0	0	1	1	
LOWER 25%		0	0	4	0	0	0			
CLASS		0	0	15	0	0	0			
UPPER 25%	20	0	0	0	4	0	0	1	2	
LOWER 25%		0	0	0	4	0	0			
CLASS		0	0	1	14	0	0			

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DISTRACTOR EFFECTIVENESS ANALYSIS

	QUESTION #	BLANK	0 A	1 B	2 C	3 D	4 E	QUEST.WEIGHT	RIGHT	ANSWERS
UPPER 25%	21	0	0	0	4	0	0	1	2	
LOWER 25%		0	0	0	4	0	0			
CLASS		0	0	0	15	0	0			
UPPER 25%	22	0	0	0	0	4	0	1	3	
LOWER 25%		0	0	0	1	3	0			
CLASS		0	0	0	2	13	0			
UPPER 25%	23	0	0	0	0	4	0	1	3	
LOWER 25%		0	0	0	0	4	0			
CLASS		0	0	0	1	14	0			
UPPER 25%	24	0	0	0	0	0	4	1	4	
LOWER 25%		0	0	0	0	1	3			
CLASS		1	0	0	0	1	13			
UPPER 25%	25	0	0	0	0	0	4	1	4	
LOWER 25%		0	0	0	0	0	4			
CLASS		1	0	0	0	0	14			